

CLAIMS

1. A method of producing a fluoropolymer by which
a melt-processable fluoropolymer (A) having a specific
5 unstable terminal group or groups (P) is subjected to melt-
kneading in a kneader comprising a stabilization treatment
zone to thereby produce a fluoropolymer (B) resulting from
conversion of said specific unstable terminal group or
groups (P) to -CF₂H,

10 said specific unstable terminal group or groups (P)
comprising alkoxy carbonyl groups, fluoroalkoxy carbonyl
groups and/or carboxyl group quaternary nitrogen compound
salts,

15 the melt-kneading being carried out in the absence or
presence of an alkali metal element or alkaline earth metal
element,

the mass of said alkali metal element or alkaline
earth metal element being not greater than 2 ppm of the
composition under melt-kneading, and

20 the melt-kneading in said stabilization treatment
zone being carried out in the presence of water.

2. The method of producing a fluoropolymer
according to Claim 1,

25 wherein the melt-kneading in the stabilization
treatment zone is carried out in the presence of oxygen gas.

3. The method of producing a fluoropolymer
according to Claim 1 or 2,

30 wherein the kneader is a screw-type extruder.

4. The method of producing a fluoropolymer
according to Claim 3,

35 wherein the screw-type extruder is a twin-screw
extruder.

5. The method of producing a fluoropolymer according to any of Claims 1 to 4,

5 wherein the temperature in the stabilization treatment zone is set at 280 to 430°C.

6. A fluoropolymer obtained by the method of producing a fluoropolymer according to any of Claims 1 to 5.

10 7. A fluoro-polymerised material comprising a fluoropolymer,

wherein said fluoropolymer comprises (1) a fluorocopolymer derived from at least one fluoromonomer selected from the group consisting of tetrafluoroethylene, 15 hexafluoropropylene, vinylidene fluoride and chlorotrifluoroethylene, (2) a chlorotrifluoroethylene homopolymer and/or (3) a vinylidene fluoride homopolymer,

said fluorocopolymer is one resulting from polymerization of a perfluoro(alkyl vinyl ether) and/or 20 ethylene or one not resulting from such polymerization,

said fluoropolymer is one of which polymer terminal groups are $-CF_2H$ and not more than 20 unstable terminal groups (Q) per 10^6 carbon atoms,

25 said fluoro-polymerised material contains or does not contain a metal residue containing an alkali metal element and/or alkaline earth metal element, and

the mass of said alkali metal element and/or alkaline earth metal element is not greater than 2 ppm of said fluoro-polymerised material.

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8. The fluoro-polymerised material according to Claim 7,

wherein the fluoropolymer is a product obtained by emulsion polymerization.

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9. The fluoro-polymerised material according to
Claim 7 or 8,

wherein the fluoropolymer is a fluorocopolymer
derived from tetrafluoroethylene and hexafluoropropylene.

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10. The fluoro-polymerised material according to
Claim 9,

wherein the fluorocopolymer derived from
tetrafluoroethylene and hexafluoropropylene is a
10 fluorocopolymer having a tetrafluoroethylene unit content
of 75 to 95% by mass, a hexafluoropropylene unit content of
5 to 20% by mass and a perfluoro(alkyl vinyl ether) unit
content of 0 to 5% by mass.